

COMPARISON OF GALACTIC COSMIC RAY ENVIRONMENT MODELS

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Space radiation transport codes require galactic cosmic ray (GCR) environment models as input. The most popular models are the Badhwar-O'Neill model, the Moscow State University (Nymmik) model, the new German Matthia model, the GALPROP model, the ISO model, the Burger-Usoskin model, the CREME model and the CHIME model. These models will be reviewed and compared to each other and also compared to proton, helium and heavy ion experimental data measured by various satellites and balloons. Energy and linear energy transfer (LET) spectra will be shown. Recommendations for further model development and experimental measurements will be discussed.